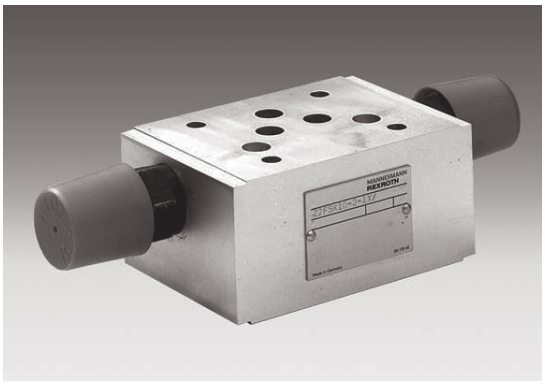
RE 27 524/11.02

Replaces: 12.95

Double throttle check valve Type Z2FSK 10

Nominal size 10
Series 1X
Maximum operating pressure 210 bar
Maximum flow 80 L/min



H/A 4100

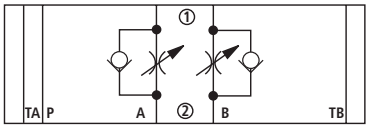
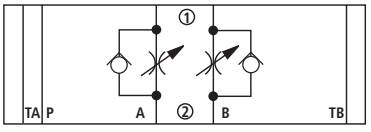
Type Z2FSK 10 –2–1X/2QV

Overview of contents

Features

- Sandwich plate valve
- Porting pattern to DIN 24 340 Form A, ISO 4401 and CETOP–RP 121 H
- Adjustment element: Screw with internal hexagon, lock nut and protective cap
- For the flow limitation of 2 actuator ports
- For meter-in or meter-out control

Ordering details, symbols (① = component side, ② = subplate side)

Symbol		Material No.	Type description
Meter-in control	Meter-out control		
		R900564522	Z2FSK 10 -2-1X/2QV

Function, section

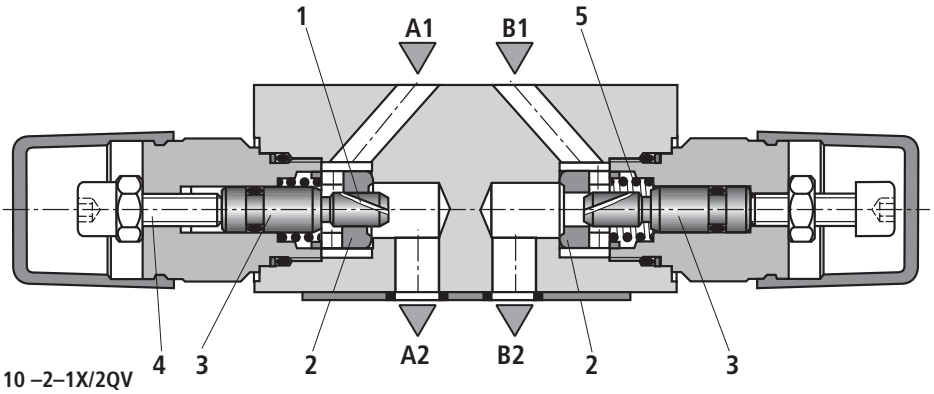
Z2FSK 10 valves are double throttle check valves of sandwich plate design.

They are used to limit the flow of two actuator ports.

Two symmetrically arranged throttle check valves limit the flow in one direction and permit free return flow in the opposite direction.

With meter-in control the pressure fluid passes through the channel A1 via the throttle area (1), that is created by the valve seat (2) and the throttle screw (3), to the actuator A2. The throttle spool (3) is axially adjustable via the adjustment screw (4) and thus enables the throttling point to be set (1).

The pressure fluid returning from actuator B2 moves the valve seat (2) against the spring (5) towards the throttle spool (3) and thus enables unrestricted flow. Depending on the installation orientation the throttling effect may be arranged as meter-in or meter-out control.



Type Z2FSK 10 –2–1X/2QV
(meter-in control)

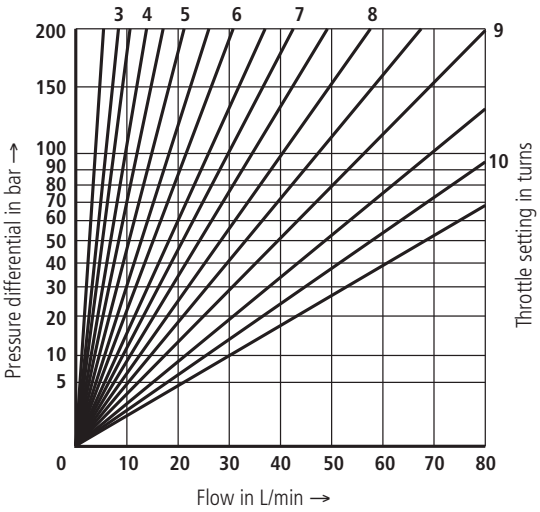
Technical data (for applications outside these parameters, please consult us!)

General		
Installation		Optional
Ambient temperature range	°C	–20 to +80 with FKM seals
Weight	kg	Approx. 1.2
Hydraulic		
Pressure fluid		Mineral oil (HL, HLP) to DIN 51 524; Fast bio-degradable pressure fluids to VDMA 24 568 (also see RE 90 221); HETG (rape seed oil); HEPG (polyglycols); HEES (synthetic ester); Other pressure fluids on request
Cleanliness class to ISO code		Maximum permissible degree of contamination of the pressure fluid is to ISO 4406 (C) class 20/18/15 [1]
Pressure fluid temperature range	°C	–20 to +80 with FKM seals
Viscosity range	mm^2/s	10 to 800
Operating pressure, max.	bar	Up to 210
Flow, max.	L/min	Up to 80

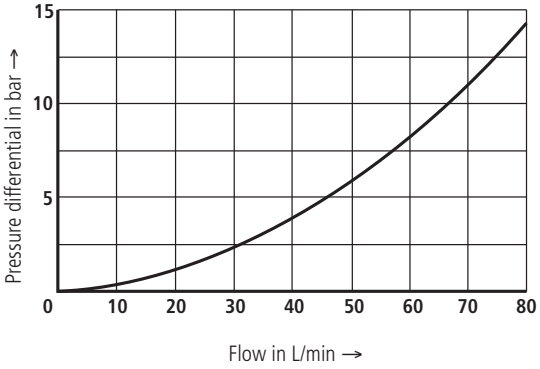
[1] The cleanliness class stated for the components must be adhered too in hydraulic systems. Effective filtration prevents faults from occurring and at the same time increases the component service life.
For the selection of filters see catalogue sheets RE 50 070, RE 50 076 and RE 50 081.

Characteristic curves (measured with $\nu = 41$ mm²/s, $\vartheta_{oil} = 40$ °C ± 5 °C)

Pressure differential Δp in relationship to the flow q_V at a constant throttle setting.

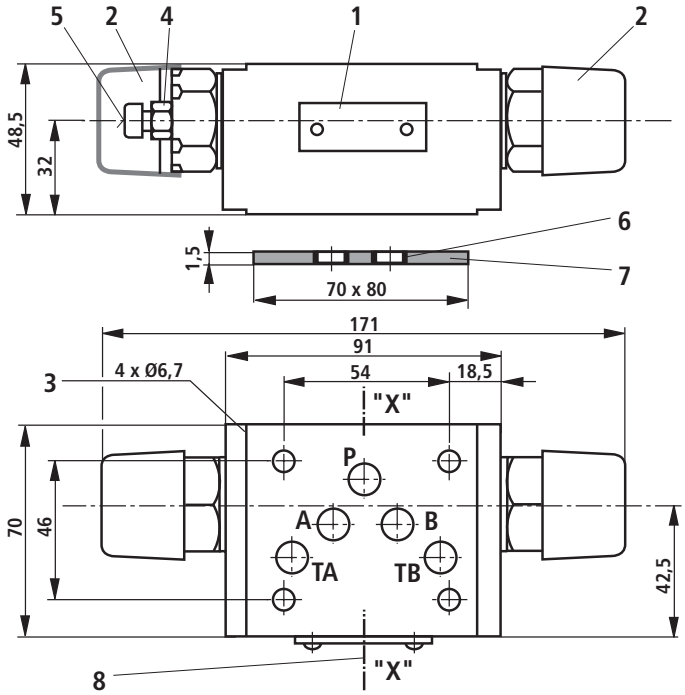


Pressure differential Δp in relationship to the flow q_V via the check valve (throttle closed)



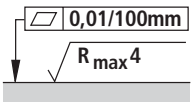
Unit dimensions

(Dimensions in mm)



1 Name plate
2 Adjustment element (screw with internal hexagon, lock nut and protective cap)
3 Valve fixing holes
4 Lock nut 10A/F
5 Adjustment screw for changing the flow cross-section (internal hexagon 5A/F)
6 Identical seal rings for ports A, B, P, TA, TB
7 R-ring plate
8 Conversion from meter-in to meter-out control is by rotating the unit about the "X"–"X" axis

Valve fixing screws
M6 DIN 912-10.9,
Tightening torque $M_A = 15.5$ Nm,
must be ordered separately



Required surface finish of the mating piece

Notes